

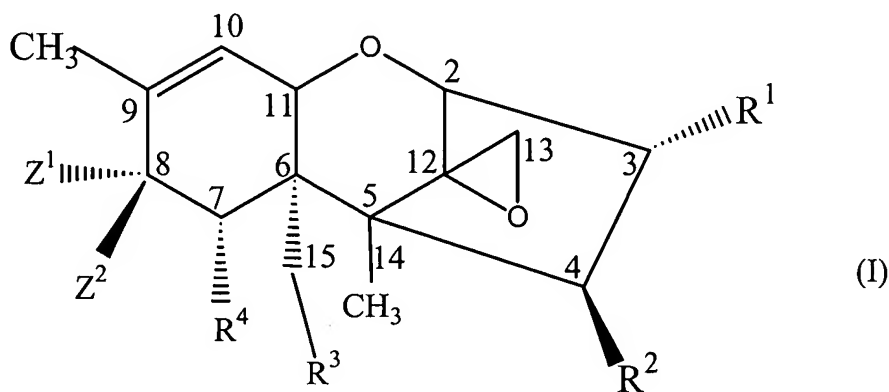
Please substitute the paragraph at page 20, lines 19-24 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

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The method according to the above(37), wherein the water-soluble organic solvent is at least one member selected from the group consisting of methyl alcohol, ethyl alcohol, propyl alcohol, acetonitrile, dimethyl sulfoxide and dimethylformamide.

IN THE CLAIMS:

Please amend Claims 13, 20-27, 30, 34, 36 and 38 and add new claims 41-53 to read as follows. A marked-up copy of these claims, showing the changes made thereto, is attached.

13. (Amended) A process for producing a hybridoma which produces the monoclonal antibody according to any of claims 1 to 6, which comprises immunizing an animal by administering to the animal a substance prepared from a compound represented by formula (I):



(wherein R^1 represents OH or acyloxy; R^2 , R^3 and R^4 , which may be the same or different, each represents H, OH or acyloxy; and Z^1 represents $\text{OCOCH}_2\text{CH}(\text{CH}_3)_2$ and Z^2 represents H, or Z^1 and Z^2 together represent $=\text{O}$, provided that at least one of R^1 , R^2 , R^3 and R^4 is OH)

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by converting at least one of the hydroxyl groups therein to acyloxy and binding a carrier substance to the carbon at the 3-position thereof, and fusing an antibody-producing cell obtained from the immunized animal with a permanent growth cell to obtain the hybridoma.

20. The immunoassay according to claim 18, wherein the trichothecene mycotoxin is selected from the group consisting of deoxynivalenol (DON), nivalenol (NIV), T-2 toxin (T-2) and derivatives thereof.

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method steps
21. (Amended) A method for determining the total amount of DON, NIV, T-2 and derivatives thereof in a sample, which comprises calculating the total amount from the value obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 3 or 4 and the value obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 5 or 6.

22. (Amended) A method for determining NIV and its derivatives in a sample, which comprises carrying out an immunoassay using the monoclonal antibody or a fragment thereof according to claim 1 or 2.

23. (Amended) A method for determining DON, NIV and derivatives thereof in a sample, which comprises carrying out an immunoassay using the monoclonal antibody or a fragment thereof according to claim 3 or 4.

24. (Amended) A method for determining DON and its derivatives in a sample, which comprises calculating the amount of DON and its derivatives from the value

obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 3 or 4 and the value obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 1 or 2.

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25. (Amended) A method for determining T-2 and its derivatives in a sample, which comprises carrying out an immunoassay using the monoclonal antibody or a fragment thereof according to claim 5 or 6.

26. (Amended) The immunoassay according to claim 18, wherein the immunoassay is selected from the group consisting of radioimmunoassay, enzyme immunoassay, fluoroimmunoassay and luminescence immunoassay.

27. The immunoassay according to claim 18, wherein the immunoassay is selected from the group consisting of competitive immunoassay and sandwich immunoassay.

30. (Amended) A kit for immunoassay for determining a trichothecene mycotoxin, comprising the reagent according to claim 28, an antigen-immobilized solid phase plate, a labeled antibody or antibody fragment which reacts with the monoclonal antibody or a fragment thereof, and a reagent for detecting the label of said antibody or antibody fragment.

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34. A kit for immunoassay for determining a trichothecene mycotoxin, comprising the reagent according to claim 28, an antigen-immobilized solid phase plate, wherein the antibody or antibody fragment which reacts with the monoclonal antibody or a

fragment thereof is labeled, a reagent for detecting the label of said antibody or antibody fragment, and a solution for the pretreatment of a sample to convert a hydroxyl group in a compound represented by formula (I) to a group represented by OR (wherein R has the same significance as defined above).

A⁹ 36. (Amended) A method for determining a trichothecene mycotoxin in a sample, which comprises treating the sample containing the trichothecene mycotoxin with a solution containing an organic solvent to extract the trichothecene mycotoxin from the sample, and determining the extracted trichothecene mycotoxin by the immunoassay according to claim 18.

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A¹⁰ 38. (Amended) The method according to claim 36, wherein the water-soluble organic solvent is at least one member selected from the group consisting of methyl alcohol, ethyl alcohol, propyl alcohol, acetonitrile, dimethyl sulfoxide and dimethylformamide.

41. (New) The immunoassay according to claim 19, wherein the trichothecene mycotoxin is selected from the group consisting of deoxynivalenol (DON), nivalenol (NIV), T-2 toxin (T-2) and derivatives thereof.

A¹¹ 42. (New) A method for determining the total amount of DON, NIV, T-2 and derivatives thereof in a sample, which comprises calculating the total amount from the value obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 3 or 4 and the value obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 5 or 6,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

43. (New) A method for determining NIV and its derivatives in a sample, which comprises carrying out an immunoassay using the monoclonal antibody or a fragment thereof according to claim 1 or 2,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

44. (New) A method for determining DON, NIV and derivatives thereof in a sample, which comprises carrying out an immunoassay using the monoclonal antibody or a fragment thereof according to claim 3 or 4,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted

or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

45. (New) A method for determining DON and its derivatives in a sample, which comprises calculating the amount of DON and its derivatives from the value obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 3 or 4 and the value obtained by an immunoassay using the monoclonal antibody or a fragment thereof according to claim 1 or 2,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

46. (New) A method for determining T-2 and its derivatives in a sample, which comprises carrying out an immunoassay using the monoclonal antibody or a fragment thereof according to claim 5 or 6,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

47. (New) The immunoassay according to claim 18, wherein the immunoassay is selected from the group consisting of radioimmunoassay, enzyme immunoassay, fluoroimmunoassay and luminescence immunoassay,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

48. (New) The immunoassay according to claim 18, wherein the immunoassay is selected from the group consisting of competitive immunoassay and sandwich immunoassay,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

49. (New) A method for determining a trichothecene mycotoxin in a sample, which comprises treating the sample containing the trichothecene mycotoxin with a solution containing an organic solvent to extract the trichothecene mycotoxin from the sample, and determining the extracted trichothecene mycotoxin by the immunoassay according to claim 18,

wherein an immunoassay for determining a trichothecene mycotoxin in a sample, which comprises converting at least one hydroxyl group in a compound represented by formula (I) having at least one hydroxyl group to a group represented by OR (wherein R represents a substituted or unsubstituted lower acyl group or a substituted or unsubstituted aromatic acyl group), and causing at least one of the monoclonal antibodies and fragments thereof to act on the obtained compound.

50. (New) The method according to claim 32, wherein the organic solvent is a water-soluble organic solvent.

51. (New) The method according to claim 32, wherein the water-soluble organic solvent is at least one member selected from the group consisting of methyl alcohol, ethyl alcohol, propyl alcohol, acetonitrile, dimethyl sulfoxide and dimethylformamide.

52. (New) The method according to claim 37, wherein the water-soluble organic solvent is at least one member selected from the group consisting of methyl alcohol, ethyl alcohol, propyl alcohol, acetonitrile, dimethyl sulfoxide and dimethylformamide.

53. (New) The method according to claim 33, wherein the water-soluble organic solvent is at least one member selected from the group consisting of methyl alcohol, ethyl alcohol, propyl alcohol, acetonitrile, dimethyl sulfoxide and dimethylformamide.